

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in application:

1. (Currently amended). A civil engineering structure cable, comprising:

a set of traction reinforcements;

two devices for anchoring the reinforcements in two respective zones of the construction, the reinforcements being spaced apart from one another at the anchoring devices;

means for deviating the reinforcements to cause the reinforcements to converge toward a running part of the cable into a substantially parallel bundle more compact than at the anchoring devices; and

at least one guide member in closely set contact around the set of reinforcements in the portion of the cable where the reinforcements converge toward the running part, said guide member having an inner surface presenting a cross section adapted to a peripheral shape of the parallel bundle and a longitudinal section having a convex curvature whereby, over the length of the guide member, said convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than and at least double a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable.

2. (Cancelled).

3. (Previously Presented). The structure cable as claimed in claim 1, wherein the angular deflections allowed by the guide member are of at least 100 milliradians

4. (Previously Presented). The structure cable as claimed in claim 1 wherein the longitudinal section of the inner surface of the guide member has a radius of

Banner & Witcoff, Ltd.
Ten South Wacker Drive
Chicago, IL 60606
312.463.5000
511500

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curvature of at least 3 meters in a portion where said guide member is in closely set contact around the set of reinforcements.

5. (Previously Presented). The structure cable as claimed in claim 4, wherein the radius of curvature of the longitudinal section of the inner surface of the guide member decreases from the portion where the member is in closely set contact around the set of reinforcements toward the running part of the cable.

6. (Previously Presented). The structure cable as claimed in claim 1, wherein the guide member is mounted with a capacity for transverse movement with respect to one of the anchoring devices.

7. (Previously Presented). The structure cable as claimed in claim 1, further comprising means for damping transverse vibrations of the bundle of reinforcements with respect to one of the anchoring devices, and wherein the guide member is placed on the set of reinforcements between the damping means and said anchoring device.

8. (Previously Presented). The structure cable as claimed in claim 7, wherein the guide member is mounted with a limited capacity for transverse movement with respect to said anchoring device, so as to provide a defined stroke of the damping means.

9. (Previously Presented). The structure cable as claimed in claim 7, wherein the anchoring device bears longitudinally against a tube connected to the structure of a part of the construction and having the reinforcements extending therethrough, wherein the damping means comprise a damper arranged between the bundle of reinforcements and a support mounted at end of said tube opposite the anchoring device, and wherein the support is mounted at the end of the tube by means of a connection designed to break when subjected to a force exceeding a predefined threshold.

10. (Previously Presented). The structure cable as claimed in claim 1, wherein the deviation means comprise a collar clamped around the set of reinforcements

at a distance from an anchoring device, and wherein the guide member is placed on the set of reinforcements between said collar and said anchoring device.

11. (Previously Presented). The structure cable as claimed in claim 10, wherein inserts are seated, together with the reinforcements, in the guide member, so as to maintain a spacing between the reinforcements inside the guide member.

12. (Previously Presented). The structure cable as claimed in claim 11, wherein said inserts comprise plastic sleeves placed individually around the reinforcements inside the guide member.

13. (Previously Presented). The structure cable as claimed in claim 12, wherein the inner surface of the guide member has a hexagonal cross section.

14. (Previously Presented). The structure cable as claimed in claim 1, wherein the guide member belongs to the deviation means and contribute to causing the reinforcements to converge toward the running part of the cable.

15. (Previously Presented). The structure cable as claimed in claim 1, wherein the guide member comprises a body of cast plastic resin around a metal reinforcing tube.

16. (Original). The structure cable as claimed in claim 5, wherein the plastic resin is a polyurethane resin.

17-24 (Cancelled).

25. (Currently Amended). A civil engineering cable and anchor construction comprising, in combination:

a cable including at least two cable strands in a bundle having a peripheral shape;

Banner & Witcoff, Ltd.
Ten South Wacker Drive
Chicago, IL 60606
312.463.5000
531520

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an anchoring device for attachment of the strands;

a collar for maintaining the strands in said peripheral shape and in a compact bundle, said collar spaced a distance from the anchoring device;

said strands forming an angle of convergence between the anchoring device and the collar;

a guide member positioned about the strands intermediate the anchoring device and the collar, said guide member shaped with a tubular inner surface adapted to the peripheral shape of the bundle of strands; and

said inner surface of said guide member having a longitudinal section forming a convex curvature over the length of the guide member ~~which allows to allow~~ angular deflection of the strands of at least 100 milliradians and greater than the maximum angle of convergence of the strands between the anchoring device and the collar.

26. (Previously Presented). The construction of claim 25 wherein the radius of curvature of the length of the inner surface of the guide member decreases from a portion located toward the anchoring device to a portion located toward the collar.

27. (New). A civil engineering structure cable, comprising:

a set of traction reinforcements;

two devices for anchoring the reinforcements in two respective zones of the construction, the reinforcements being spaced apart from one another at the anchoring devices; means for deviating the reinforcements to cause the reinforcements to converge toward a running part of the cable into a substantially parallel bundle more compact than at the anchoring devices.

at least one guide member in closely set contact around the set of reinforcements in

the portion of the cable where the reinforcements converge toward the running part, said guide member having an inner surface presenting a cross section adapted to a peripheral shape of the parallel bundle and a longitudinal section having a convex curvature whereby, over the length of the guide member, said convex curvature allows angular deflections of the reinforcements up to an angle of at least 100 milliradians and substantially greater than a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable.

28. (New). The structure cable as claimed in claim 27 wherein the longitudinal section of the inner surface of the guide member has a radius of curvature of at least 3 meters in a portion where said guide member is in closely set contact around the set of reinforcements.

29. (New). The structure cable as claimed in claim 28, wherein the radius of curvature of the longitudinal section of the inner surface of the guide member decreases from the portion where the member is in closely set contact around the set of reinforcements toward the running part of the cable.

30. (New). The structure cable as claimed in claim 27, wherein the guide member is mounted with a capacity for transverse movement with respect to one of the anchoring devices.

31. (New). The structure cable as claimed in claim 27, further comprising means for damping transverse vibrations of the bundle of reinforcements with respect to one of the anchoring devices, and wherein the guide member is placed on the set of reinforcements between the damping means and said anchoring device.

32. (New). The structure cable as claimed in claim 31, wherein the guide member is mounted with a limited capacity for transverse movement with respect to said anchoring device, so as to provide a defined stroke of the damping means.

33. (New). The structure cable as claimed in claim 31, wherein the anchoring device bears longitudinally against a tube connected to the structure of a part of the construction and having the reinforcements extending therethrough, wherein the damping means comprise a damper arranged between the bundle of reinforcements and a support mounted at end of said tube opposite the anchoring device, and wherein the support is mounted at the end of the tube by means of a connection designed to break when subjected to a force exceeding a predefined threshold.

34. (New). The structure cable as claimed in claim 27, wherein the deviation means comprise a collar clamped around the set of reinforcements at a distance from an anchoring device, and wherein the guide member is placed on the set of reinforcements between said collar and said anchoring device.

35. (New). The structure cable as claimed in claim 34, wherein inserts are seated, together with the reinforcements, in the guide member, so as to maintain a spacing between the reinforcements inside the guide member.

36. (New). The structure cable as claimed in claim 35, wherein said inserts comprise plastic sleeves placed individually around the reinforcements inside the guide member.

37. (New). The structure cable as claimed in claim 36, wherein the inner surface of the guide member has a hexagonal cross section.

38. (New). The structure cable as claimed in claim 27, wherein the guide member belongs to the deviation means and contribute to causing the reinforcements to converge toward the running part of the cable.

39. (New). The structure cable as claimed in claim 27, wherein the guide member comprises a body of cast plastic resin around a metal reinforcing tube.

40. (New). The structure cable as claimed in claim 39, wherein the plastic resin is a polyurethane resin.

41. (New). A civil engineering structure cable, comprising:
set of traction reinforcements;
two devices for anchoring the reinforcements in two respective zones of the construction, the reinforcements being spaced apart from one another at the anchoring devices;
means for deviating the reinforcements to cause the reinforcements to converge toward a running part of the cable into a substantially parallel bundle more compact than at the anchoring devices; and
at least one guide member in closely set contact around the set of reinforcements in the portion of the cable where the reinforcements converge toward the running part, said guide member having an inner surface presenting a cross section adapted to a peripheral shape of the parallel bundle and a longitudinal section having a convex curvature whereby, over the length of the guide member, said convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable, wherein the longitudinal section of the inner surface of the guide member has a radius of curvature of at least 3 meters in a portion where said guide member is in closely set contact around the set of reinforcements, and wherein the

radius of curvature of the longitudinal section of the inner surface of the guide member decreases from the portion where the member is in closely set contact around the set of reinforcements toward the running part of the cable.

42. (New). The structure cable as claimed in claim 41, wherein the guide member is mounted with a capacity for transverse movement with respect to one of the anchoring devices.

43. (New). The structure cable as claimed in claim 41, further comprising means for damping transverse vibrations of the bundle of reinforcement; with respect to one of the anchoring devices, and wherein the guide member is placed on the set of reinforcements between the damping means and said anchoring device.

44. (New). The structure cable as claimed in claim 43, wherein the guide member is mounted with a limited capacity for transverse movement with respect to said anchoring device, so as to provide a defined stroke of the damping means.

45. (New). The structure cable as claimed in claim 43, wherein the anchoring device bears longitudinally against a tube connected to the structure of a part of the construction and having the reinforcements extending therethrough, wherein the damping means comprise a damper arranged between the bundle of reinforcements and a support mounted at end of said tube opposite the anchoring device, and wherein the support is mounted at the end of the tube by means of a connection designed to break when subjected to a force exceeding a predefined threshold.

46. (New). The structure cable as claimed in claim 41, wherein the deviation means comprise a collar clamped around the set of reinforcements at a distance from an anchoring device, and wherein the guide member is placed on the set of reinforcements between said collar and said anchoring device.

47. (New). The structure cable as claimed in claim 46, wherein inserts are seated, together with the reinforcements, in the guide member, so as to maintain a spacing between the reinforcements inside the guide member.

48. (New). The structure cable as claimed in claim 47, wherein said inserts comprise plastic sleeves placed individually around the reinforcements inside the guide member.

49. (New). The structure cable as claimed in claim 48, wherein the inner surface of the guide member has a hexagonal cross section.

50. (New). The structure cable as claimed in claim 41, wherein the guide member belongs to the deviation means and contribute to causing the reinforcements to converge toward the running part of the cable.

51. (New). The structure cable as claimed in claim 41, wherein the guide member comprises a body of cast plastic resin around a metal reinforcing tube.

52. (New). The structure cable as claimed in claim 51, wherein the plastic resin is a polyurethane resin.

53. (New). A civil engineering structure cable, comprising:

a set of traction reinforcements;

two devices for anchoring the reinforcements in two respective zones of the construction, the reinforcements being spaced apart from one another at the anchoring devices; means for deviating the reinforcements to cause the reinforcements to converge toward a running part of the cable into a substantially parallel bundle more compact than at the anchoring devices;

at least one guide member in closely set contact around the set of reinforcements in the portion of the cable where the reinforcements converge toward the running part, said guide member having an inner surface presenting a cross section adapted to a peripheral shape of the parallel bundle and a longitudinal section having a convex curvature whereby, over the length of the guide member, said convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable;

a tube connected to the structure of a part of the construction and having the reinforcements extending therethrough, one of the anchoring devices bearing longitudinally against said tube;

a damper arranged between the bundle of reinforcement and a support mounted at an end of said tube opposite said one of the anchoring devices, for damping transverse vibrations of the bundle of reinforcements with respect to the anchoring device; and

wherein the guide member is placed on the set of reinforcements between the damper and said anchoring device, wherein the guide member is mounted with a limited capacity for transverse movement with respect to said anchoring device, so as to provide a defined stroke of the damper, wherein said support is mounted at the end of the tube by means of a connection designed to break when subjected to a force exceeding a predefined threshold.

54. (New). A civil engineering structure cable, comprising:

a set of traction reinforcements;

Banner & Witcoff, Ltd.
Ten South Wacker Drive
Chicago, IL 60606
312.463.5000
531.589

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two devices for anchoring the reinforcements in two respective zones of the construction, the reinforcements being spaced apart from one another at the anchoring devices; means for deviating the reinforcements to cause the reinforcements to converge toward a running part of the cable into a substantially parallel bundle more compact than at the anchoring devices; and

at least one guide member in closely set contact around the set of reinforcements in the portion of the cable where the reinforcements converge toward the running part, said guide member having an inner surface presenting a cross section adapted to a peripheral shape of the parallel bundle and a longitudinal section having a convex curvature whereby, over the length of the guide member, said convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable, wherein the guide member comprise: a body of cast plastic resin around a metal reinforcing tube.

55. (New). The structure cable as claimed in claim 54, wherein the guide member is mounted with a capacity for transverse movement with respect to one of the anchoring devices.

56. (New). The structure cable as claimed in claim 54, further comprising means for damping transverse vibrations of the bundle of reinforcements with respect to one of the anchoring devices, and wherein the guide member is placed on the set of reinforcements between the damping means and said anchoring device.

57. (New). The structure cable as claimed in claim 54, wherein the deviation means comprise a collar clamped around the set of reinforcements at a distance from an

anchoring device, and wherein the guide member is placed on the set of reinforcements between said collar and said anchoring device.

58. (New). The structure cable as claimed in claim 57, wherein inserts are seated, together with the reinforcements, in the guide member, so as to maintain a spacing between the reinforcements inside the guide member.

59. (New). The structure cable as claimed in claim 54, wherein the guide member belongs to the deviation means and contribute to causing the reinforcements to converge toward the running part of the cable.

60. (New). The structure cable as claimed in claim 54, wherein the plastic resin is a polyurethane resin.